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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,399	07/22/2002	Takanori Kamada	10921.118USWO	4956
7590                    10/03/2007 Hamre, Schumann, Mueller & Larson, P.C. P.O. BOX 2902-0902 Minneapolis, MN 55402			EXAMINER LUDLOW, JAN M	
		ART UNIT 1743	PAPER NUMBER	
		MAIL DATE 10/03/2007	DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/089,399	KAMADA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jan M. Ludlow	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 July 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,6-10,12,13 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) 8,10,18 and 19 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,9,12,13 and 20 is/are rejected.
- 7) Claim(s) 6 and 7 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 July 2007 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any

inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 9, 12-13, 16, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 11-166886 (hereafter "JP").

6. JP teaches a chromatographic flow cell having a supply flow path 112, discharge flow path 116, a first intermediate flow path 120 and second intermediate flow path 114. The first intermediate flow path 120 intersects the second intermediate flow path 114 throughout a portion of the diameter of path 114 (see, e.g., Fig. 3), and therefore intersects at positions both aligned with and offset from the central axis of second intermediate flow path 114. Specifically, the center line of path 120 is offset from the central axis of path 114, and the depth (cross section) of path 120 is smaller than the diameter of 114, 112 and 116 as shown. Groove 120 is unaligned with "an axis" of flow path 114 in that the flow path 114 has a greater diameter than the groove 120. Thus, the groove is unaligned with an axis drawn through the unintersected portion of 114. Note that the claims do not require a central axis of the first intermediate flow path to be unaligned with a central axis of the second intermediate flow path. See the broadest definition of axis as a line about which a geometric body may be rotated

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(<http://www.thefreedictionary.com/axis>). A chromatographic system as claimed is shown in Figure 1. With respect to claims 14-15, it is the examiner's position that the apparatus of JP is structurally capable of the intended use recited.

7. Claims 1, 9, 12-13, 16, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugiyama (6122049).

8. Sugiyama teaches a chromatographic flow cell having a supply flow path 112, discharge flow path 116, a first intermediate flow path 120 and second intermediate flow path 114. The first intermediate flow path 120 intersects the second intermediate flow path 114 throughout a portion of the diameter of path 114 (see, e.g., Fig. 3), and therefore intersects at positions both aligned with and offset from the central axis of second intermediate flow path 114. Specifically, the center line of path 120 is offset from the central axis of path 114, and the depth (cross section) of path 120 is smaller than the diameter of 114, 112 and 116 as shown. Groove 120 is unaligned with "an axis" of flow path 114 in that the flow path 114 has a greater diameter than the groove 120. Thus, the groove is unaligned with an axis drawn through the unintersected portion of 114. Note that the claims do not require a central axis of the first intermediate flow path to be unaligned with a central axis of the second intermediate flow path. See the broadest definition of axis as a line about which a geometric body may be rotated (<http://www.thefreedictionary.com/axis>). A chromatographic system as claimed is shown in Figure 1. With respect to claims 14-15, it is the examiner's position that the apparatus of JP is structurally capable of the intended use recited.

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9. Claims 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: While Hrdina shows the tapered channels as in claims 6-7, there is no motivation to form the channels as now claimed in claim 1, as in original claim 11.

11. Applicant's arguments filed July 2, 2007 have been fully considered but they are not persuasive.

12. The Sugiyama references teach a single circular groove 120 having two segments 120a, 120b, not two grooves 120a and 120b. Groove 120 is unaligned with "an axis" of flow path 114 in that the flow path 114 has a greater diameter than the groove 120. Thus, the groove is unaligned with an axis drawn through the unintersected portion of 114. Note that the claims do not require a **central** axis of the first intermediate flow path to be unaligned with a **central** axis of the second intermediate flow path. See the broadest definition of axis as a line about which a geometric body may be rotated (<http://www.thefreedictionary.com/axis>).

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aday additionally teaches a cell with input off set from the central axis of the measurement path.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

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See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jan M. Ludlow  
Primary Examiner  
Art Unit 1743

Jml  
September 28, 2007